Meeting of the Central Valley Flood Protection Board

Department of Water Resources Staff Report FloodSAFE Environmental Stewardship and Statewide Resource Office Delta Levees Flood Protection Program Delta Levees Maintenance Subventions Program

September 23, 2010

I) INTRODUCTION:

The Delta Levees Maintenance Subventions Program is authorized by the California Water Code, Sections 12980 thru 12995. The Subventions Program has been in effect since passage of the Way Bill in 1973 which has been modified periodically by Legislation. The Water Code Section 12981 states the intent of the legislature as "...the physical characteristics of the delta should be preserved essentially in their present form; and that the key to preserving the delta's physical characteristics is the system of levees defining the waterways and producing the adjacent islands..."

Water Code Section 12987(a) states: "Local agencies maintaining project or nonproject levees shall be eligible for reimbursement pursuant to this part upon submission to and approval by the board of plans for the maintenance and improvement of the project or nonproject levees, including plans for the annual routine maintenance of the levees, in accordance with the criteria adopted by the board."

DWR staff, on behalf of the Central Valley Flood Protection Board (Board), evaluates applications submitted by local agencies, i.e. reclamation districts and levee maintaining districts, and presents its recommendations to the Board. The Board reviews and approves staff recommendations prior to any agreements are executed between the parties. If approved, the Board will enter into agreements with the local agencies. The agreements are to reimburse local agencies for eligible costs as permitted by the law.

The Department has worked with the Board to establish procedures and criteria used to manage the program. The criteria prioritizing levee work is illustrated in Attachment A.

II) <u>Funding:</u>

Historically, the Subventions Program funds averaged about \$6 million annually. The maintenance works covers between 600 and 700 miles of levees, project and non-project, each year. Since the passage of Propositions 1E and 84, the funding level for the Subventions Program has significantly increased. The table below summarizes the funding level and the actual state reimbursements through the FloodSAFE. The funding level and challenges associated with cash flow are discussed in the paragraphs that follow.

Fiscal Year	Total Application Amount (\$)	Maximum Reimbursement (\$)	Total Project Cost (\$)	State Reimbursement (\$)
2007-2008	82 million	25.75 million	23 million	16 million
2008-2009	88 million	20 million	17 million	12 million
2009-2010	80 million	18 million	Final Claims due October 31, 2010	To be determined
2010-2011	73 million	15 million (proposed)	To be determined	To be determined

Fiscal Year 2007-08:

The allocated funding for this fiscal year was \$25.75 million. The Board executed 65 work agreements with local agencies for the work to be completed no later than June 30, 2008. The final claims received in fall 2008 from 60 local agencies totaled about \$23 million of work, of which approximately \$16 million was the State cost share and \$7 million was the local cost share. The unused funds will revert back to the source, which is Proposition 84.

Fiscal Year 2008-09:

The allocated funding for this fiscal year was \$20 million. The Board executed 66 work agreements with local levee maintaining agencies for the work to be completed no later than June 30, 2009. Staff received final claims from 62 local agencies before the deadline of November 30, 2009. All final claims, which show approximately \$17 million of work completed, have been audited by staff. To date approximately \$11 million of the state cost share has been reimbursed. Staff is waiting for Department of Fish and Game approval to reimburse the remaining 4 final claims.

Fiscal Year 2009-10:

The allocated funding for this fiscal year was \$18 million. The board executed 66 work agreements with local levee maintaining agencies for the work to be completed no later than June 30, 2010. To date staff has received progress claims from one local agency and no final claims for reimbursement. The deadline to submit final claims is November 1, 2010. Local agencies may request a 30-day extension of time.

Fiscal Year 2010-11:

The allocated funding for this fiscal year is \$15 million. This amount is a reasonable funding level and is the outcome of discussions between staff and local agencies' representatives. Although the cash flow has not been secured yet, staff has prepared a funding plan for the Board approval based on the anticipated money coming from future bond sales. The source of funding for the Fiscal Year 2010-11 Subventions Program is Proposition 1E.

Staff has received 68 applications totaling approximately \$74 million. Cash flow will not be guaranteed until the State Treasurer Office in collaboration with the Department of Finance release bond sales proceeds. Tables 1 thru 3 are prepared for the Boards review and approval. Table 1 lists application amounts by local maintaining agencies and show eligible amount of reimbursements by priority, as defined in the Board Procedures and Criteria. Table 2 shows maximum and estimated eligible reimbursements and corresponding advance amounts. Table 3 provides summary of reimbursements and corresponding rates for each priority up to the anticipated funding of \$15 million.

III) PROGRAM RELATED ITEMS:

Senate Bill 808

Water Code section 12986 was planned to become inoperative on July 1, 2010 and would have impacted the allowable reimbursement. The enactment of Senate Bill 808 allows for State reimbursement to continue to be up to 75 percent of the total project cost to the local agency. It extends the sunset date to July 1, 2013 by changing Section 12986 (d) to state: "This section shall become inoperative on July 1, 2013, and, as of January 1, 2014, is repealed, unless a later enacted statute, that becomes operative on or before January 1, 2014, deletes or extends the dates on which it becomes inoperative and is repealed."

After July 1, 2013, (providing there is no later enacted statute as stated above) Water Code Section 12986 will read as follows:

"(a) It is the intention of the Legislature to reimburse from the General Fund an eligible local agency pursuant to this part for costs incurred in any year for the maintenance or improvement of project or nonproject levees as follows:

- (1) No costs incurred shall be reimbursed if the entire cost incurred per mile of levee is one thousand dollars (1,000) or less.
- (2) Fifty percent of any costs incurred in excess of one thousand dollars (1,000) per mile of levee shall be reimbursed.
- (3) The maximum total reimbursement from the General Fund shall not exceed two million dollars (2,000,000) annually.
 - (b) This section shall become operative on July 1, 2013."

Senate Bill 991

This bill would appropriate \$30 million from the Disaster Preparedness and Flood Prevention Bond Act of 2006 to the Department of Water Resources for flood protection projects that either improve the sustainability of the Sacramento-San Joaquin Delta, implement specified flood management actions in the Sacramento-San Joaquin Delta, or do both. This bill is currently enrolled as of August 30, 2010.

Memorandum of Understanding between FEMA and CalEMA

The Federal Emergency Management Agency(FEMA) and the California Emergency Management Agency(CalEMA) recently signed a Memorandum of Understanding (MOU) to provide detailed criteria in regards to FEMA's public assistance eligibility for local maintaining agencies. This MOU applies only to nonproject levees in the Legal Sacramento-San Joaquin Delta. A full copy of the MOU is attached as Attachment B.

IV) STAFF RECOMMENDATIONS:

Therefore staff recommends the following:

- Board approve Table 2, which establishes reimbursement amounts and the limit on advances providing that the approval is conditional upon DWR receiving adequate funding level to proceed with the Subventions Program.
- 2) Authorize DWR staff to proceed with preparation and circulation of the work agreements for signature by the Board's Executive Officer.

Tables and Attachments:

Table 1 Application Amounts by Priority
Table 2 Estimated Reimbursements

Table 3 Summary of Estimated Reimbursements

Attachment A Funding Prioritization Scheme
Attachment B MOU between FEMA and CalEMA

Table 1
2010-11 DELTA LEVEES MAINTENANCE SUBVENTIONS PROGRAM

				Levee Rehabilitation				
				Priority One Priority 2				Priority 3
RD NO	Name	Application Amount \$	Net Allowable Maintenance \$	Category 2 Fish & Wild. \$	Category 3 HMP \$	Category 4 Eligible Bull.192-82 \$	\$	\$
2126	Atlas Tract	155,000	43,700	5,000	0	104,000	0	0
2028	Bacon Island	685,000	273,600	0	0	397,000	0	0
	Bethel Island	250,000	188,500	50,000	0	0	0	0
2042	Bishop Tract	1,612,500	148,200	37,500	250,000	492,500	676,500	0
404	Boggs Tract	138,000	13,300	30,000	0	40,000	54,000	0
	20990	.00,000	10,000	30,000		.5,555	0.,000	
756	Bouldin Island	728,000	342,000	0	0	368,000	0	0
2033	Brack Tract	800,500	205,200	0	0	584,500	0	0
2059	Bradford Island	181,000	103,600	15,000	28,000	27,000	0	0
2000	Brannan-Andrus	2,006,800	558,600	365,000	0	1,053,800	0	0
800	Byron Tract	1,135,000	184,300	215,000	150,000	576,000	0	0
000	Byron Tract	1,100,000	101,000	210,000	100,000	070,000		Ĭ
2098	Cache-Haas Slough	112,250	100,750	500	0	0	0	0
2000	Collinsville	99,000	19,000	5,000	11,500	62,500	0	0
2117	Coney Island	434,000	102,600	3,500	300,000	22,500	0	0
2111	Deadhorse Island	240,000	49,400	9,000	70,000	109,000	0	0
2137	Dutch Slough	400.000	72,200	4,000	171,000	149,000	0	0
2101	Daton Glough	+00,000	12,200	7,000	17 1,000	143,000	0	- 0
536	Egbert Tract	109,000	78,400	0		20,000	0	0
	Empire Tract	1,038,000	199,500	20,000	670,000	138,000	0	0
773		280,000	201,400	60.000	070,000	0	0	0
2113		292,000	30,400	26,500	60,000	73,500	100,000	0
3	Grand Isalnd	2,191,000	547,200	20,300	00,000	1,615,000	100,000	0
ა	Grand Isamu	2,191,000	547,200	U	0	1,015,000	U	0
2060	Hasting Tract	314,800	298,800	0	0	0	0	0
2060 2025		1,609,000	209,000	129,000	0	971,000	289,000	0
799		126,200	117,300	129,000	0	971,000	289,000	0
							0	0
830	Jersey Island	1,234,000	294,500	508,000	80,000	336,000		0
2038	Jones Tract, Lower	580,000	171,000	60,000	0	340,000	0	0
2039	Jones Tract, Upper	431,000	146,700	60,000	0	215,000	0	0
2039	King Island	662,500	172,900	00,000	0	480,500	0	0
307	Lisbon Island	467,500	125,400	35,000	0	300,500	0	0
2027	Mandeville Island	4,878,500			350,000	,	3,162,500	0
2110	McCormack-WM. Tract	195,000	271,700 167,200	0	350,000	1,080,000 19,000	3,162,500	0
2110	WICCOTTIACK-VVIVI. TTACE	193,000	107,200	0	0	19,000	0	0
2030	McDonald island	3,735,000	260,300	25,000	100,000	1,245,000	2,091,000	0
2030	Medford Island	429,000	112,100	23,000	125,000	186,000	2,091,000	0
150		575,000	343,900	0	125,000	213,000	0	0
999	Netherlands	415,000	372,600	10,000	0	213,000	0	0
348	New HopeTract	1,347,000	330,600	262,000	0	737,000	0	0
340	нем нореттаст	1,347,000	330,000	202,000	0	737,000	0	0
2024	Orwood/Palm Tract	606,000	202,100	60,000	0	330,000	0	0
551	Pearson District	591,000	267,900	00,000	0	309,000	0	0
2058		130,000	47,500	5,000	20,000	55,000	0	
1007	Pico/Naglee	162,000	93,700	60,000	20,000	0	0	
2090	Quimby Isalnd	1,011,000	133,000	12,500	375,000	312,500	171,000	0
2090	Quilliby ISalilu	1,011,000	133,000	12,500	373,000	312,500	171,000	0
2037	Rindge Tract	742,500	300,200	0	425,000	1,500	0	0
684	Roberts Island, Lower	640,000	304,000	60,000	423,000	260,000	0	0
524	Roberts Island, Middle	506,000	184,300	4,500	25,000	282,500	0	0
544	Roberts Island, Widdle Roberts Island, Upper	721,000	285,000	5,000	25,000	416,000	0	0
403	Rough & Ready Island	328,000	129,200	40.000	0	152,000	0	0
403	Trough & Treaty Island	320,000	128,200	40,000	0	152,000	0	0
501	Ryer Island	381,750	338,650	22,500	0	0	0	0
2074	Sargent-Barnhart Tract	4,719,090	66,500	350,000	0		4,299,090	0
341	Sherman Island	600,000	370,500	15,000	0	195,000	4,299,090	0
2115		16,637,250	125,400	22,500	637,500	195,000	15,845,250	0
1614		984,000	53,200	25,000	037,500	255,000	648,000	0
1014	Smith Tract	964,000	53,∠00	25,000	0	∠55,000	048,000	- 0
2000	Stark Tract	263,000	66,500	2,000	0	191,000	0	0
2089								
38	Staten Island	962,000	467,400	60,000	410,000	0	0	0

				Levee Rehabilitation					
					Priority One		Priority 2	Priority 3	
RD NO	Name	Application Amount	Net Allowable Maintenance	Category 2 Fish & Wild.	Category 3 HMP	Category 4 Eligible Bull.192-82			
		\$	\$	\$	\$	\$	\$	\$	
548	Terminous Tract	446,000	189,900	15,000	-	225,000	0	0	
1601	Twitchell Island	573,500	226,100	11,500	25,000	299,000	0	0	
563	Tyler Island	1,595,000	435,100	25,000	82,000	1,030,000	0	0	
1	Union Island, East	460,000	266,000	25,000	0	155,000	0	0	
2	Union Island, West	470,500	307,800	10,000	0	136,500	0	0	
1607	Van Sickle Island	120,000	70,300	0	0	46,000	0	0	
2065	Veale Tract	557,500	96,900	115,000	312,500	28,000	0	0	
2023	Venice Island	4,538,125	233,700	15,000	1,215,000	0	3,062,125	0	
2040	Victoria Island	1,232,500	286,900	10,000	150,000	770,500	0	0	
554	Walnut Grove	160,000	64,600	6,000	0	86,000	0	0	
2026	Webb Tract	440,500	245,100	0	0	182,500	0	0	
828	Weber Tract	190,000	32,300	65,000	0	91,000	0		
2122	Winter Island	299,500	91,200	0	200,000	3,500	0	0	
2072	Woodward Island	604,000	167,200	60,000	0	368,000	0	0	
2119	Wright-Elmwood Tract	1,069,500	134,900	65,000	150,000	495,000	217,500	0	
2068	Yolano	110,000	101,300	0	0	0	0	0	
	Total 68 Districts	72,737,765	13.240.200	3,101,500	6,392,500	18,630,800	30,615,965	0	

Table 2
2010-11 DELTA LEVEE MAINTENANCE SUBVENTIONS PROGRAM
ESTIMATED REIMBURSEMENTS

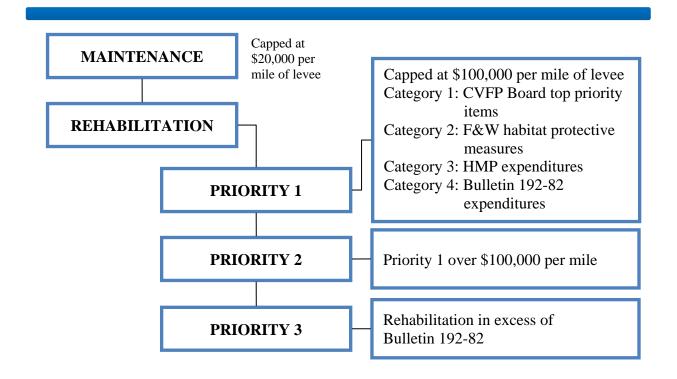
	ESTIMATED REIMBURSEMENTS								
RD NO	Name	Application Amount \$	Levee Length Miles	Deductible \$1,000 Per Mile \$	Eligible Costs \$	Maximum Reimbursement 75 % of (4) \$	Estimated Available Reimbursement \$	Advance 75 % of (6) \$	
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	
2126	Atlas Tract	155,000	2.3	(2,300)	152,700	114,525	36,525	27,394	
2028	Bacon Island	685,000	14.4	(14,400)	670,600	502,950	205,200	153,900	
	Bethel Island	250,000	11.5	(11,500)	238,500	178,875	178,875	134,156	
2042	Bishop Tract	1,612,500	7.8	(7,800)	1,604,700	1,203,525	246,578	184,933	
404	Boggs Tract	138,000	0.7	(700)	137,300	102,975	32,475	24,356	
756	Bouldin Island	728,000	18.0	(18,000)	710,000	532,500	256,500	192,375	
2033	Brack Tract	800,500	10.8	(10,800)	789,700	592,275	153,900	115,425	
2059	Bradford Island	181,000	7.4	(7,400)	173,600	130,200	100,968	75,726	
	Brannan-Andrus	2,006,800	29.4	(29,400)	1,977,400	1,483,050	692,700	519,525	
800	Byron Tract	1,135,000	9.7	(9,700)	1,125,300	843,975	363,857	272,892	
2098	Cache-Haas Slough	112,250	11.0	(11,000)	101,250	75,938	75,938	56,953	
	Collinsville	99,000	1.0	(1,000)	98,000	73,500	22,936	17,202	
2117	,	434,000	5.4	(5,400)	428,600	321,450	208,338	156,254	
2111	Deadhorse Island	240,000	2.6	(2,600)	237,400	178,050	73,845	55,384	
2137	Dutch Slough	400,000	3.8	(3,800)	396,200	297,150	130,545	97,909	
536	Egbert Tract	109,000	10.6	(10,600)	98,400	73,800	58,800	44,100	
2029	Empire Tract	1,038,000	10.5	(10,500)	1,027,500	770,625	452,196	339,147	
773	Fabian Tract	280,000	18.6	(18,600)	261,400	196,050	196,050	147,038	
2113	Fay Island	292,000	1.6	(1,600)	290,400	217,800	68,428	51,321	
3	Grand Isalnd	2,191,000	28.8	(28,800)	2,162,200	1,621,650	410,400	307,800	
2060	Hasting Tract	314,800	16.0	(16,000)	298,800	224,100	224,100	168,075	
2025	Holland Tract	1,609,000	11.0	(11,000)	1,598,000	1,198,500	253,500	190,125	
799	Hotchkiss Tract	126,200	8.9	(8,900)	117,300	87,975	87,975	65,981	
830	Jersey Island	1,234,000	15.5	(15,500)	1,218,500	913,875	636,212	477,159	
2038	Jones Tract, Lower	580,000	9.0	(9,000)	571,000	428,250	173,250	129,938	
2039	Jones Tract, Upper	431,000	9.3	(9,300)	421,700	316,275	155,025	116,269	
2044	King Island	662,500	9.1	(9,100)	653,400	490,050	129,675	97,256	
307	Lisbon Island	467,500	6.6	(6,600)	460,900	345,675	120,300	90,225	
2027	Mandeville Island	4,878,500	14.3	(14,300)	4,864,200	3,648,150	353,999	265,499	
2110	McCormack-WM. Tract	195,000	8.8	(8,800)	186,200	139,650	125,400	94,050	
2030	McDonald island	3,735,000	13.7	(13,700)	3,721,300	2,790,975	256,896	192,672	
2041	Medford Island	429,000	5.9	(5,900)	423,100	317,325	137,726	103,295	
150	Merritt Island	575,000	18.1	(18,100)	556,900	417,675	257,925	193,444	
	Netherlands	415,000	32.4	(32,400)	382,600	286,950	286,950	215,213	
348	New HopeTract	1,347,000	17.4	(17,400)	1,329,600	997,200	444,450	333,338	
2024	Orwood/Palm Tract	606,000	13.9	(13,900)	592,100	444,075	196,575	147,431	
551	Pearson District	591,000	14.1	(14,100)	576,900	432,675	200,925	150,694	
2058	Pescadero Tract	130,000	2.5	(2,500)	127,500	95,625	47,959	35,969	
1007	Pico/Naglee	162,000	8.3	(8,300)	153,700	115,275	115,275	86,456	
2090	Quimby Isalnd	1,011,000	7.0	(7,000)	1,004,000	753,000	270,079	202,559	
2037	Rindge Tract	742,500	15.8	(15,800)	726,700	545,025	407,564	305,673	
684	Roberts Island, Lower	640,000	16.0	(16,000)	624,000	468,000	273,000	204,750	
524	Roberts Island, Middle	506,000	9.7	(9,700)	496,300	372,225	152,330	114,248	
544	Roberts Island, Upper	721,000	15.0	(15,000)	706,000	529,500	217,500	163,125	
403	Rough & Ready Island	328,000	6.8	(6,800)	321,200	240,900	126,900	95,175	
501	Ryer Island	381,750	20.6	(20,600)	361,150	270,863	270,863	203,147	
2074	Sargent-Barnhart Tract	4,719,090	3.5	(3,500)	4,715,590	3,536,693	312,375	234,281	
341	Sherman Island	600,000	19.5	(19,500)	580,500	435,375	289,125	216,844	
2115	Shima Tract	16,637,250	6.6	(6,600)	16,630,650	12,472,988	384,546	288,410	
1614	Smith Tract	984,000	2.8	(2,800)	981,200	735,900	58,650	43,988	

RD NO	Name	Application Amount \$	Levee Length Miles	Deductible \$1,000 Per Mile \$	Eligible Costs	Maximum Reimbursement 75 % of (4)	Reimbursement \$	Advance 75 % of (6)
2222	O. 1 T	(1)	(2)	(3)	(4)	(5)	(6)	(7)
2089	Stark Tract	263,000	3.5	(3,500)	259,500	194,625	51,375	38,531
38	Staten Island	962,000	24.6	(24,600)	937,400	703,050	571,526	428,645
548	Terminous Tract	446,000	16.1	(16,100)	429,900	322,425	153,675	115,256
1601	Twitchell Island	573,500	11.9	(11,900)	561,600	421,200	188,930	141,698
563	Tyler Island	1,595,000	22.9	(22,900)	1,572,100	1,179,075	380,270	285,203
1	Union Island, East	460,000	14.0	(14,000)	446,000	334,500	218,250	163,688
2	Union Island, West	470,500	16.2	(16,200)	454,300	340,725	238,350	178,763
1607	Van Sickle Island	120,000	3.7	(3,700)	116,300	87,225	52,725	39,544
2065	Veale Tract	557,500	5.1	(5,100)	552,400	414,300	293,053	219,790
2023	Venice Island	4,538,125	12.3	(12,300)	4,525,825	3,394,369	708,015	531,011
2040	Victoria Island	1,232,500	15.1	(15,100)	1,217,400	913,050	287,057	215,292
554	Walnut Grove	160,000	3.4	(3,400)	156,600	117,450	52,950	39,713
2026	Webb Tract	440,500	12.9	(12,900)	427,600	320,700	183,825	137,869
828	Weber Tract	190,000	1.7	(1,700)	188,300	141,225	72,975	54,731
2122	Winter Island	299,500	4.8	(4,800)	294,700	221,025	154,242	115,682
2072	Woodward Island	604,000	8.8	(8,800)	595,200	446,400	170,400	127,800
2119	Wright-Elmwood Tract	1,069,500	7.1	(7,100)	1,062,400	796,800	214,307	160,730
2068	Yolano	110,000	8.7	(8,700)	101,300	75,975	75,975	56,981
	Total 68 Districts	72,737,765	757	(756,800)	71,980,965	53,985,724	15,000,000	11,250,000

Table 3
2010-11 Delta Levee Maintenance Subventions Program
Estimated Reimbursement Summary

				Available		
Levee Costs		Reimbursemen		imbursement	Reimbursement	
Work Categories		Eligible Costs		Amount	Rate	
Maintenance Deductible	\$	756,800				
Net Maintenance Costs	\$	13,240,200	\$	9,930,150	75%	
Fish and Wildlife Costs	\$	3,101,500	\$	2,326,125	75%	
HMP Costs	\$	6,392,500	\$	2,743,725	43%	
Bulletin 192-82	\$	18,630,800		0	0%	
Priority 1 Total	\$	28,124,800		5,069,850		
Priority 2	\$	30,615,965		0	0%	
Priority 3		0		0	0%	
Total	\$	72,737,765	\$	15,000,000		

DELTA LEVEES MAINTENANCE SUBVENTIONS PROGRAM FUNDING PRIORITIZATION SCHEME



MEMORANDUM OF UNDERSTANDING BETWEEN THE STATE OF CALIFORNIA EMERGENCY MANAGEMENT AGENCY AND

THE U.S. DEPARTMENT OF HOMELAND SECURITY'S FEDERAL EMERGENCY MANAGEMENT AGENCY

REGARDING CRITERIA FOR PUBLIC ASSISTANCE ELIGIBILITY FOR RECLAMATION DISTRICTS IN THE SACRAMENTO/SAN JOAQUIN LEGAL DELTA

I. PARTIES

The Parties to this Memorandum of Agreement (MOU) are the State of California Emergency Management Agency (Cal EMA) and the U.S. Department of Homeland Security's Federal Emergency Management Agency (FEMA).

II. PURPOSE

The purpose of this Memorandum of Understanding (MOU) is to clarify for the Parties, the requirements for FEMA Public Assistance funding for emergency flood fighting, emergency repair, permanent restoration, and/or replacement of eligible damaged Non-Project Levees within the Reclamation Districts (Districts) in the Sacramento/San Joaquin Legal Delta (Legal Delta). "Districts" refers to special districts that are formed pursuant to the Reclamation District Act in the California Water Code Section 50000 et seq. This MOU clarifies disaster assistance eligibility requirements for Non-Project Levees that are the responsibility of Districts in the Legal Delta under major disasters and emergencies declared after the date this MOU is executed. This MOU applies to facilities owned by the Districts that are levees or their facilities directly linked to levees. Eligibility criteria for other facilities owned by the Districts but not directly related to the levees will be addressed as any other.

The minimum criteria set forth in this MOU are solely for the purpose of meeting FEMA Public Assistance eligibility. The minimum criteria do not constitute "FEMA Standards or design" as FEMA does not exercise specific regulatory authority over the Districts, nor do the criteria herein meet Public Law 84-99 or any other federal criteria applicable to facilities that provide protection against flood. The criteria stated herein do not supersede any provisions of the National Flood Insurance Act of 1968 (P.L. 90-488); the Flood Disaster Protection Act of 1973 (PL 93-234); or Executive Order 11988, Floodplain Management.

III. AUTHORITY

Sections 306 (a) and 406 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C. Sections 5149 and 5172, respectively.

IV. BACKGROUND

- A. Following the joint approval of the FEMA-State (State of California) Agreement for FEMA-677-DR-CA (1983), an Amendment No.1 was necessary to add a portion of the Legal Delta to the Declaration. In addition, the Amendment established specific responsibilities and actions for FEMA, the State, and the affected Districts. One of the primary requirements of this Amendment was the development of a Flood Hazard Mitigation Plan (FHMP) for the Legal Delta by the State. This FHMP, dated September 15, 1983, was submitted to FEMA and approved.
- B. Following flooding that resulted in Presidential Declaration FEMA-758-DR-CA (1986), FEMA requested a status report on the progress of the FHMP work. The report showed little progress had been made on the implementation of the required work; furthermore, the FHMP did not (1) specify an implementation plan, (2) specify a time frame for completion of the work, or (3) specify that the work was to protect against a 100-year flood. FEMA issued a Mission Assignment to the U.S. Army Corps of Engineers (USACE) to develop the elevations for a flood of that magnitude for the Legal Delta. Following the completion of those studies, Amendment No. 5 to the FEMA-State Agreement for Disaster FEMA-758-DR was signed to address issues of the implementation plan, a time frame for completion, and requirements for levee geometry (see Attachment 1). The Amendment was only applicable to certain Districts.
- C. Since Amendment No. 5 was signed, it has become apparent that additional clarification of Public Assistance eligibility is required. The Districts manage and control Legal Delta levees that are a major collection point for potable water supplied to approximately two-thirds of the State's population. In addition, the Legal Delta and its levees are of vital concern to agricultural, transportation, urban, industrial, environmental, and recreational interests. For these reasons, the uniform eligibility criteria provided in Article VI applies solely to the District Non-Project Levees in the Legal Delta.

V. LEGAL DELTA AREA AND TYPES OF LEVEES

The area defined as the Legal Delta is shown in Attachment 2. The Districts within that boundary have levees that generally fall into one of two categories. In some instances, a District may have a combination of Project Levees and Non-Project Levees.

A. "Project Levees." These levees are within the USACE Rehabilitation and Inspection Program (RIP), as authorized by P.L. 84-99. Attachment 3 is a map showing the Project Levees. Such levees generally are eligible for FEMA Public Assistance only for the purpose of flood-fighting and debris removal following a presidentially declared disaster.

Project levees are integral to the functioning of the legal delta system. This MOU does not supersede or suggest any additional eligibility criteria for project levees.

B. "Non-Project Levees." Levees not under the USACE RIP and in compliance with requirements as set forth herein, are eligible for FEMA Public Assistance. These levees are shown in Attachment 4.

VI. CRITERIA FOR FEMA PUBLIC ASSISTANCE ELIGIBILITY

A. General

The following eligibility criteria shall be utilized for all Districts requesting FEMA Public Assistance for future disaster events after the date of signature of the MOU by Cal EMA and FEMA under the Robert T. Stafford Disaster Relief and Emergency Assistance Act, P.L. 93-288 amended, or subsequent applicable Federal Law:

B. Levee Geometry

- 1. The levee crown elevations must be at least one foot above the elevation of a flood expected to occur on the average of once every 100 years, and must meet levee cross section requirements as set forth in this section.
- 2. The minimum levee crown width shall be at least 16 feet. On the waterside of the levee, the slope shall be at least 1.5 feet horizontal to 1 foot vertical, with revetment in areas where erosion has been a problem. On the landside of the levee, the slope shall be at least 2 feet horizontal to 1 foot vertical, with flatter slopes in the lower portion of the levee in areas where soil sloughing and/or seepage have previously been identified.
- 3. Alternative engineering or design methods may be employed to meet the criteria set forth in this section, provided that the District furnish such engineering and design data that clearly demonstrates such methods meet or exceed the minimum level of protection provided for in this section. FEMA will evaluate such methods on a case-by-case basis to ensure the level of protection is met.

C. Profile/Cross Section Criteria

1. Each District must have available profiles and cross sections prepared no more than five years prior to the disaster event. If the information on these documents shows any discrepancies, the District must provide to Cal EMA updated profiles and cross sections for the area where the discrepancies were noted or a maintenance plan as set forth in Section VI D. Failure to address areas of non-compliance may result in a determination of ineligibility.

- 2. The 100-year stage-frequency elevation and the one foot of freeboard shall be clearly delineated on the profiles. The datum to be used in preparing the profiles and cross sections shall be Mean Sea Level (NVGD), 1988.
- 3. Field work and preparation of profiles and cross sections must be conducted (and documents certified) by a licensed surveyor.
- 4. Profiles of the existing levee grade shall be made with elevations shown at a minimum of every 1000 feet, unless there are low points in elevations between intervals. If that occurs, cross section profiles at intervals frequent enough to identify each low point must be taken. Obvious deviations include but are not limited to erosion along levee slopes, infrastructure encroachment into levee slopes, and areas of subsidence. The profile shall be taken on the entire length of all Non-Project levees within the District.

D. Annual Maintenance Plan

Non-Project levees belonging to the Districts shall meet the current standard set by the state or the criteria set forth in this section, whichever provides a greater level of flood protection, to be eligible for FEMA Public Assistance. The parties acknowledge that there may be instances where a District may be deficient in meeting these criteria. If one or more of the criteria is not met, the respective District shall submit an Annual Maintenance Plan to Cal EMA that fully describes any deficiencies, including a strategy and schedule for correcting said deficiencies based on risk. Cal EMA will review the plans to ensure all required elements have been addressed.

District Annual Maintenance Plans shall include, at a minimum:

- The regular annual maintenance and inspection schedule and frequency.
- Work items and standards to be employed for each scheduled cycle.
- The method used to identify, prioritize, and carry out maintenance efforts.
- Maintenance and repairs that would warrant immediate corrective action and the corresponding action.
- The annual maintenance budget.

VII. Cal EMA RESPONSIBILITIES

- A. Cal EMA will be responsible for providing the Districts with the criteria set forth in Article VI above and ensuring Districts are aware of the following responsibilities:
 - 1) In the event a District submits an application for FEMA Public Assistance, each District is responsible for knowing the requirements for, and ensuring compliance with, eligibility criteria set forth in Section VI of this document.

- 2) The District is responsible for preparing and having available profile and cross-section information, as set forth in Section VI C.
- 3) The District is responsible for developing an annual maintenance plan to address any deficiencies, including an aggressive strategy and a schedule for correcting those deficiencies, as per Section VI D.
- 4) The District is responsible for notifying Cal EMA of any participation in the USACE RIP.
- 5) The District is responsible for knowing FEMA and State requirements for requesting Public Assistance, documentation requirements, time lines and deadlines, and applicable Federal contracting requirements. The District is also responsible for informing any engineering firms and/or construction firms of time constraints and deadlines, and for ensuring that any disaster-related work is done within required time frames.
- 6) The District will agree to indemnify and hold harmless the United States and the State of California against any and all liability, claims, suits, losses, costs, and legal fees caused by, arising out of, or resulting from any negligent act or omission related to the performance of work to meet the standards and criteria set forth herein.
- B. Cal EMA will ensure that specific information provided by FEMA that may impact the eligibility of, or funding for, disaster-related damage in the Legal Delta is provided to the Districts in a timely manner.
- C. Cal EMA will review District Annual Maintenance Plans to ensure compliance with Section VI D and maintain a list of each District's plan status.
- D. Cal EMA will ensure that consideration of eligibility for emergency repairs and emergency management work should be based on whether a District has demonstrated a good faith effort to substantially comply with eligibility criteria set forth in Section VI of this document.

VIII. FEMA RESPONSIBILITIES

- A. FEMA will work with Cal EMA to ensure timely submittal of information that could affect applicable program criteria or eligibility status for the Legal Delta.
- B. FEMA will inform the State of any issues that may arise related to disaster funding for reported damage to any eligible District levees in the Legal Delta.
- C. FEMA will work with Cal EMA to maintain the District Annual Maintenance Plan list and use the list to establish the eligibility of Reclamation Districts.

IX. POINTS OF CONTACT

William Roche, Infrastructure Branch Chief

U.S. Department of Homeland Security, Federal Emergency Management Agency Disaster Assistance Division, Infrastructure Branch

1111 Broadway, Suite 1200

Oakland, CA 94607-4052

Email:

William.Roche@dhs.gov

Phone:

510-627-7077

Michael Baldwin, State Public Assistance Officer California Emergency Management Agency Recovery Division, Public Assistance 3650 Schriever Avenue Mather, CA 95655

Email:

Michael.Baldwin@calema.ca.gov

Phone:

916-845-8203

X. MODIFICATION

This MOU may be modified by mutual written consent of the Parties. The party desiring modification or amendment of this MOU should explain the basis for the need to modify the MOU.

XI. EFFECTIVE DATE AND TERMINATION

This MOU is effective the date of the last signature below, and shall remain in effect until terminated upon agreement of the Parties. Either party can terminate this MOU by providing forty-five (45) days written notice of its intent to terminate to the non-terminating party.

XII. APPROVALS

The following officials are authorized to sign this MOU expressing their respective party's intent to agree to all terms above.

XIII. FEMA AND Cal EMA CONCURRENCE

IN WITNESS WHEREOF, the parties hereto have executed this Memorandum of Understanding as of the day and year signed.

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By: Tom Ma	Date:_	1/29/10
Director, Office of Statewide Operations		
DHS/Federal Emergency Management A	gency	
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By: Naucy Word	Date:_	2/24/10
Regional Administrator		
By: Director, Disaster Assistance Division	Date:	2/25/10

ATTACHMENTS:

Attachment 1. Amendment #5 to the FEMA/State Agreement for FEMA-758-DR

Attachment 2. Map of Sacramento/San Joaquin Legal Delta

Attachment 3. Map of Project Levees

Attachment 4. Map of Non-Project Levees

Amendment #5 to the FEMA/State Agreement for FEMA-758-DR



Federal Emergency Management Agency

Region IX Building 105
Presidio of San Francisco, California 94129

April 28, 1987

The Honorable George Deukmejian Governor, State of California State Capitol Sacramento, California 95814

Dear Governor Deukmejian:

Subject: Amendment #5, FEMA/State Agreement

FEMA-758-DR-CA

This letter is Amendment #5 to the FEMA/State Agreement on the subject major disaster declaration which was executed on behalf of the State of California dated February 25, 1986. This Agreement is amended as follows:

1. Paragraph 10 of the original Agreement is changed to include:

Add: The intent of this section of the the Federal/State Agreement is to establish the requirements for the approval of Damage Survey Reports (DSRs) under major disaster declaration FEMA-758-DR-CA, and to define eligibility criteria for reclamation districts requesting Federal disaster assistance in the event of future declarations under Public law 93-288 (PL 93-288) or subsequent applicable Federal law. The requirements contained within this section are applicable to districts requesting assistance under major disaster declaration FEMA-758-DR, and to those districts that received assistance under major disaster declarations FEMA-633-DR, FEMA-651-DR, FEMA-669-DR, FEMA-677-DR, and emergency declaration FEMA-3078-EM. This section applies to those reclamation districts, referenced above, located within the Sacramento/San Joaquin Delta, and RD 1607 (Van Sickle Island) and RD 2122 (Winter Island). The specific requirements are as follows:

A. IMPLEMENTATION PLAN

The aforementioned districts must submit an Implementation Plan, to be approved by FEMA, which upgrades their levees to the standards of the Short-Term Levee Rehabilitation Plan of September 15, 1983, the FEMA required Flood Hazard Mitigation Plan for the Sacramento/San Joaquin Delta (HMP). The implementation plan must be submitted by November 1, 1987, and must include:

I. Schedule

a. Districts must establish a five-year time frame to upgrade levees to the Short-Term HMP. The starting point for the five-year program is September 10, 1986, and all required short-term mitigation must be completed by September 10, 1991.

- b. Exceptions to the implementation schedule may be granted by FEMA, if a district is restricted in the placement of material because of sub-soil instability or other geologic conditions affecting stability. The implementation plan may also be adjusted if a district sustains significant additional damage as a result of future disaster events.
- c. The implementation schedule must identify the type, extent and location of HMP work (i.e., raising levee crown, rock placement, etc.) to be accomplished each year. The estimated cost for such work must be identified by station.
- d. The implementation schedule must include the estimated cost of FEMA required HMP work, per year, over the five-year period. The estimated cost must be supported by calculations from cross sections.
- e. A district must immediately notify FEMA, through the Office of Emergency Services (OES), if the FEMA approved schedule cannot be met. Within 30 days of the notice of non—compliance, FEMA will meet and confer jointly with district, OES, and Department of Water Resources (DWR) representatives to develop appropriate remedial action. Districts must provide documentary proof to justify any exceptions to the schedule. Failure to comply with the approved schedule, without justification acceptable to FEMA (see b. above) will result in the withdrawal of eligible disaster assistance funding, the issuance of a Bill for Collection for advanced or reimbursed funding provided under major disaster declaration FEMA-758-DR, and a determination by FEMA of ineligibility for future disaster assistance.

2. Profiles

Profiles submitted by districts must include:

- a. Existing levee profiles (1983 or later) at 1,000-foot intervals.
- b. The 100-year frequency elevations (waterside) at 1,000-foot intervals, using the 1982 Sacramento/San Joaquin Delta USACE Stage Frequency Study (Revised 1986).

3. Cross Sections

Cross Sections submitted by districts must include:

a. Existing levee cross sections (1983 or later) at 1,000-foot intervals. Cross sections must be provided at more frequent intervals if 1,000-foot intervals do not show typical cross section. For those reclamation districts that have already submitted their profiles/cross sections to FEMA, a resubmission of more frequent than 1,000 foot intervals is not required.

- b. The HMP standard cross sections superimposed on the existing cross sections.
- c. The minimum levee crown width shall be at least 16 feet.
 - 1. Waterside slopes shall be at least 1.5 horizontal to 1 vertical, with revetment in areas where erosion has been a problem.
 - Landslide slopes shall be at least 2 horizontal to 1 vertical, with flatter slopes in the lower portion of the levee in areas where soil stability and seepage have been a problem.
 - 3. The levee shall have all-weather access roads.
- d. Where applicable, cross sections must indicate the FEMA-758 disaster-related damage, in order to separate those damages from the HMP work to be accomplished. Disaster related damages will be calculated from cross sections or other acceptable site specific documentation.

4. As-Built Drawings

a. As-built drawings must be submitted annually until work completion. The drawings must include levee profiles at 500-foot intervals. Typical cross sections at 500-foot intervals must show the type of work accomplished. Cross sections and profiles must be provided at more frequent intervals if 500-foot intervals do not show typical cross sections.

B. PROJECT APPLICATION APPROVAL

Project applications will be evaluated by FEMA, and approved or denied on a district by district basis. Districts must complete the following, in order for FEMA to remove DSRs from suspension, approve project applications and obligate funds under major disaster declaration FEMA-758-DR-CA and future major disaster declarations.

l. District Actions

- a. A district must submit to FEMA, through OES, the information required and outlined by FEMA under Section A above. If the required information is not submitted, FEMA will inform the Governor's Authorized Representative of what must be submitted by the district, before FEMA will concur with the district's Implementation Plan.
- b. A district must formally adopt a resolution committing itself to accomplish the levee mitigation and improvement work according to the FEMA approved Implementation Plan, and to maintain the levee to FEMA approved HMP standard.

c. A district must submit as-built drawings after completion of disaster-related work. The drawings must include typical cross sections at 500-foot intervals. Typical cross sections must be provided at more frequent intervals if 500-foot intervals do not show typical sections, especially in those areas where disaster related damage occurred.

2. Supplemental Damage Survey Reports

- a. A district must notify FEMA, through OES, of anticipated cost overruns associated with approved permanent work, and prior to undertaking projects not identified on previously approved Damage Survey Reports (DSRs). A district must notify OES of emergency work cost overruns within five days after receiving the approved project application. Without advance notification, FEMA may not approve additional funding for cost overruns or supplemental work.
- b. To support requests for consideration of cost overruns and/or additional work, a district must provide substantial supporting documentation, including stationing and quantities. Insufficiently documented costs will be ineligible for reimbursement.

3. Funding (Letter of Credit)

- a. Reimbursement is limited to costs incurred to date, including billings on hand which require payment, and those expenditures expected to be incurred within the next four days of filing the claim for remimbursement. FEMA progress payments are limited to 75% of the FEMA 75% share of eligible costs, pending final inspection findings. Final payments to districts may be adjusted by FEMA after audit.
- b. FEMA will only fund costs for engineering and surveys applicable to disaster-related damage repairs. FEMA will not fund those costs for engineering and surveys that are necessary to accomplish the hazard mitigation requirements indicated above.

C. RESPONSIBILITIES

1. District Responsibility

a. A district is solely responsible for the work that is accomplished as a result of the Implementation Plan requirements. A district is also responsible for the maintenance of the levees to the FEMA approved HMP standard. A district must acquire the necessary data, engineering, surveys, and geotechnical information to ensure that the levee upgrading work does not result in unusual or unexpected subsidence of the levee, breaching of the levee, or subsequent damage to improved private and/or public facilities.

- b. A district will submit to and assist in an annual Delta levee inspection program, and will prepare a plan for annual maintenance and rehabilitation work, which will include information pertaining to achievement of objectives outlined in the Flood Hazard Mitigation Plan, Sacramento/San Joaquin Delta, for disaster declaration FEMA-758-DR-CA. Districts must submit this plan to DWR, Central District, by November 1 of each year, beginning November 1987.
- c. A district will complete its annual levee maintenance by November 1 of each year.
- d. A district will support a long-term comprehensive Federal/ state/local flood control project that includes consideration of rehabilitating all Delta nonproject levees, thereby addressing the levee integrity issue, as well as issues such as wetlands, access to public lands, water quality, transportation, water transfer, recreation, fish and wildlife habitat enhancement, flood control, and identification of benefits and costs.
- e. A district must also hold and save the United States and the State of California free from damages due to the required work, and shall idemnify the Federal Government and the State of California against any claims arising from such work.

2. State Responsibility

- a. The State, in keeping with the comprehensive hazard Mitigation Plan for the Sacramento/San Joaquin Delta area, will notify each reclamation district within the Delta and RDs 1607 (Van Sickle Island) and 2122 (Winter Island), of the requirements for the Federal Emergency Management Agency (FEMA) approval of Damage Survey Reports (DSRs under FEMA-758-DR) and for eligibility for disaster assistance in the event of future declarations.
- b. The state will provide funding, as available, through the Delta Levee Maintenance Subvention Program, for rehabilitation and maintenance.
- c. The state will perform annual on-site inspections of district levees encompassed by the HMP.
- d. The state will prepare an annual report on the mitigation work accomplished under the FEMA required, and approved, Implementation Plan during the prior year in addition to providing information regarding the mitigation work status of each district included in the HMP. The annual report will be submitted to FEMA no later than the first day of July each year, beginning July 1988.

e. The state must immediately notify FEMA, if the aforementioned deadline cannot be met. FEMA, OES, and DWR will meet and confer within 30 days of the discovery of non-compliance, to discuss the cause of non-compliance and to determine appropriate remedial action.

3. Federal Responsibility

- a. FEMA will meet annually with the district, OES, and DWR representatives, to discuss and evaluate the status of and problems associated with the annual HMP report. This annual meeting will present an opportunity for FEMA and the state to raise issues and concerns relative to the Delta, and also allows more substantive communication between all parties.
- b. FEMA will provide disaster assistance funding to the reclamation districts through the state under PL 93-288 or subsequent applicable Federal law. Funding will be provided to the reclamation districts on a district by district basis.

This Agreement may be amended at any time by written approval of both parties.

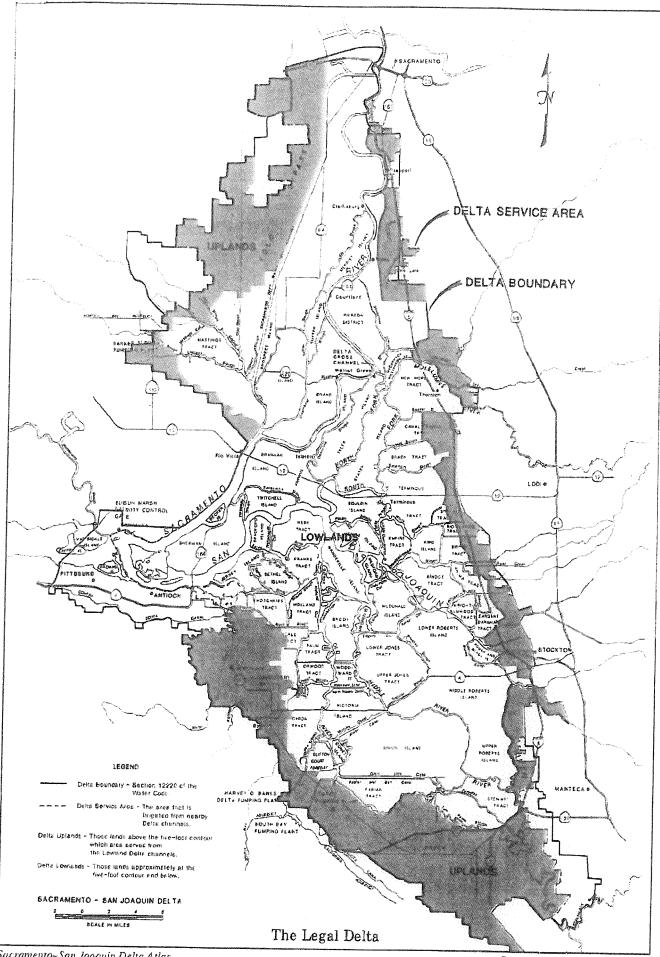
Sincerely,

Robert L. Vickers

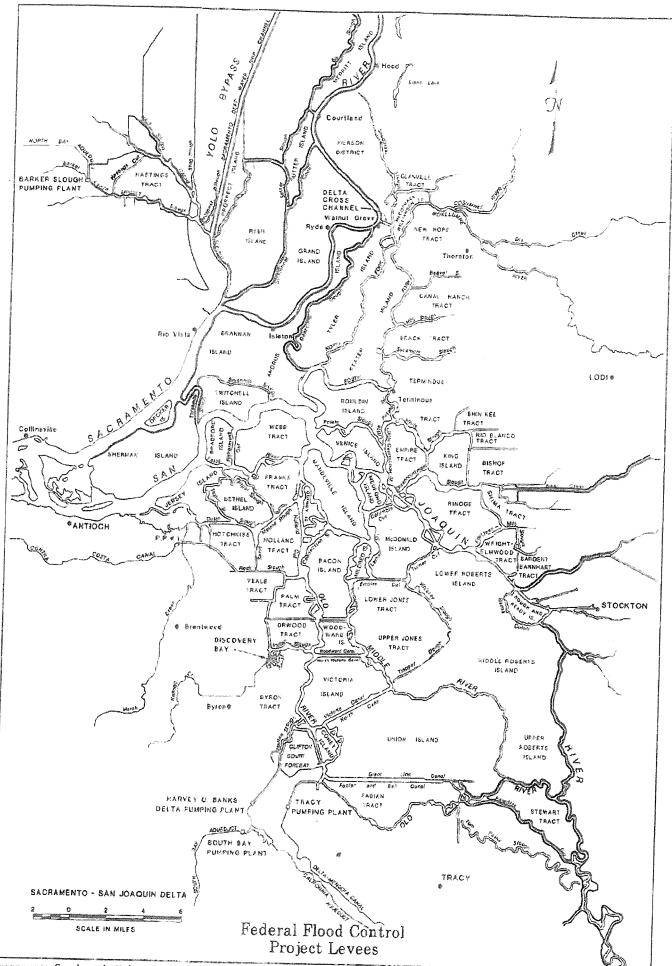
GOVERNOR'S AUTHORIZED REPRESENTATIVE

Date: [[Prd. 29, 1987

Map of Sacramento/San Joaquin Legal Delta



Map of Project Levees



Map of Non-Project Levees

